

the chelate backbone, i.e., attached to a carbon atom thereof. The functional group is capable of reacting with amino acid residues of a protein. Isothiocyanate and N-hydroxysuccinimide esters are disclosed as suitable functional groups.

As discussed at column 3, lines 40-44, the functional group can be attached directly to the chelate backbone or it can be attached by the use of a side chain. See also the disclosure at column 3, lines 65-67, wherein it is stated that "The side chain should be essentially free of reactive groups other than the desired functional groups as described above" (emphasis added).

Thus, it is evident that Gansow does not teach DTPA derivatives having alkane, benzyl or phenylethylene pendant groups. Instead, Gansow teaches DTPA derivatives in which a functional group is attached to the carbon backbone of DTPA either directly or via a side chain. See, e.g., Examples 1 and 2 wherein EDTA and DTPA derivatives are disclosed having p-isothiocyanatobenzyl as the side group attached to the carbon backbone.

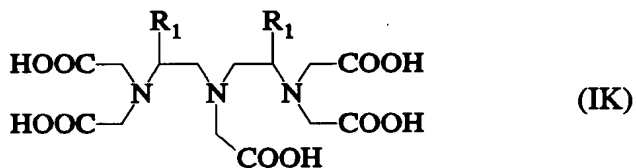
Attention is also directed to the provisos of applicants' claim 1 wherein it is stated that, *inter alia*,  $Z^1$  and  $Z^2$  are not  $-\text{CH}_2-\text{C}_6\text{H}_5$ ,  $Z^1$  is not phenyl when  $Z^2$  is H, and at least one of the subscripts q and l is 1.

In view of the above remarks, it is respectfully submitted that Gansow (U.S. 4,824,986) fails to anticipate applicants' claimed invention.

#### Rejection under 35 U.S.C. §103

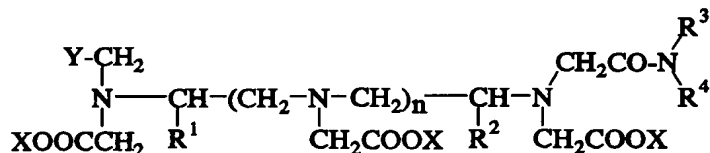
The disclosure of Gansow (U.S. 4,824,986) is discussed above.

In the rejection, reference is made to the disclosure of formulae IA-IO, in particular formula IK, of Berg et al. (U.S. 5,198,208):



At column 2, lines 26-28, Berg et al. disclose that R<sub>1</sub> is hydrogen, hydroxyalkyl, optionally hydroxylated alkoxy or optionally hydroxylated alkoxyalkyl. All of formulae IA-IO exhibit pendant R<sub>1</sub> groups.

Gries et al. (EP 0 263 059) disclose amide complexes (note the -CH<sub>2</sub>CO-NR<sup>3</sup>R<sup>4</sup> structure) of the following formula:



In this formula, R<sup>1</sup> and R<sup>2</sup> can each be hydrogen, alkyl, phenyl or benzyl, or R<sup>1</sup> and R<sup>2</sup> can, when n is 0, together be trimethylene or tetramethylene.

In the rejection, it is asserted that it would be obvious to substitute the benzyl side chains of Gansow for "the alkyl groups of Berg et al." However, alkyl side groups are not disclosed by Berg et al. In any event, as discussed in the §102 rejection, the side groups of Gansow are not alkanes, benzyl or phenylethylene. The Gansow side groups must include a functional group such as isothiocyanate or N-hydroxysuccinimide ester. Thus, the disclosure of Gansow's side groups does not provide motivation which would lead one of ordinary skill in the art to modify the compounds of Berg et al. in such a manner as to arrive at a compound in accordance with applicants' claimed invention.

With regard to Gries et al., it is asserted in the rejection that it would be obvious to substitute Gries et al.'s benzyl group for the alkyl group of Berg et al. As noted above, Berg et al. do not disclose alkyl side groups. Furthermore, even if R<sub>1</sub> in Berg et al.'s formula IK was replaced by an R<sup>1</sup> group of Gries et al., the resultant compound would not be a compound within applicants' literally claimed genus. Compare the proviso clauses of applicants' claim 1.


None of the prior art references disclose side groups in accordance with applicants' claimed invention. For example, nothing within the prior art references would suggest to one of ordinary

skill in the art a benzyloxy side group as alluded to in the rejection. The references do not disclose such a side group, nor is there any suggestion to convert the side groups described therein so as to arrive at a benzyloxy group.

The mere ability to modify the disclosure of a reference or to combine two references does not, in and of itself, establish obviousness under 35 U.S.C. §103. Instead, there must be some motivation provided by the prior art which would lead one of ordinary skill in the art to make the alleged modification. See In re Laskowski, 10 U.S.P.Q.2d 1397 (Fed. Cir. 1989); and In re Gordon, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). In the instant case, none of the references discloses a side group in accordance with applicants' claimed compounds. More importantly, none of the prior art references provide motivation which would lead one of ordinary skill in the art to provide a side chain on a chelating agent which differs from all of the side chains disclosed by the prior art references.

In view of the above remarks, withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

Respectfully submitted,

  
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